Amendment Serial No. 09/729,748

REMARKS

Claims 1-20 are pending, claims 1, 8-12, 19 and 20 stand rejected and claims 2-7 and 13-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21-33 have been added. No new matter has been included.

Claims 1, 8-12, 19 and 20 are rejected under 35 USC §102(b) as being anticipated by Lee ("Normalization, windowing and quantization of soft-decision Viterbi decoder inputs in CDMA," provided by the applicant in the IDS filed 8/13/002).

Applicant respectfully disagrees with, and explicitly traverses, the examiner's reason for rejecting the claims as the present invention includes subject matter that Lee fails to disclose. It is well recognized that to constitute a rejection pursuant to 35 USC §102, i.e., anticipation, all material elements recited in a claim must be found in one unit of prior art. For reasons shown below, Lee does not anticipate the present invention because Lee does not include each and every element recited in the claims.

Lee, as read by applicant, teaches the results of a study of IS-95 CDMA system using different normalization methods; mean square and absolute value. The mean square normalization factor is determined as the average power of the symbols received in a current frame and the absolute value factor determines the average absolute value of the received symbols in a current frame. Lee, however, does not disclose "scaling factors that have substantially the same value for adjacent demodulated output words of said plurality of successively demodulated output words" as is recited in claim 1. Hence, rather than scaling factors that are substantially the same, the methods taught by Lee for determining normalization or scale factors based on a current frame may vary substantially from one frame to the next.

Having shown that the present invention includes subject matter not disclosed by Lee, the invention recited in claim 1 is patently distinguishable from the teaching of Lee. Applicant submits that the reason for the examiner's rejection of claim 1 has been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claim.

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With regard to independent claim 12, this claim recites a receiver for performing the method disclosed in independent claim 1. According, claim 12 is also allowable for the same reasons recited in overcoming the rejection of claim 1.

With regard to dependent claims 8-11 and 19-20, these claims ultimately depend from independent claims 1 and 12, respectively, which have been shown to be patently distinguishable and allowable over the cited reference. Accordingly, these claims, by virtue of their dependency from an allowable base claim, are also allowable over the cited reference. Applicant respectfully requests that the rejection be withdrawn and the claims allowed.

Claims 1, 8-12, 19 and 20 also stand rejected pursuant to 35 USC §103 as being unpatentable over Li (USP No. 6,621,850) in view of the prior art described in pages 2-3 of the present invention (USP No. 6,125, 136, and "Mobile Radio Communications," R. Steele). It is the examiner's position that the present invention is obvious because Li teaches demodulating and de-interleaving but fails to teach scaling by factors that have substantially the same value for successively demodulated output words and Steele teaches application of fixed scaling factors.

Applicant respectfully disagrees with, and explicitly traverses, the examiner's reason for rejecting the claims. A claimed invention is prima facie obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest **all** the claim limitations (emphasis added).

In this case, a prima facie case of obviousness of the present invention cannot be made since the references cited, individually or in combination, do not disclose, suggest or provide the motivation for one skilled in the art to develop the novel features recited in the present invention. As the examiner notes Li does not teach scaling and Steele teaches a fixed scaling factor. Neither teaches "factors that have substantially the same value for successively demodulated output words."

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Furthermore, the specification of the instant application notes that using fixed scaling factors "is prone to loss of information due to underflow and overflow." Thus, one skilled in the art would not look to incorporate the teaching of Steele with the teaching of Li to develop the novel features of the present invention as there is no reasonable expectation of success.

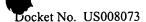
Having shown that neither Li and Steele provide the motivation to combine their teaches as suggested by the examiner, applicant submits that the examiner's reason for rejecting the claims has been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claims.

With regard to independent claim 12, this claim recites a receiver for performing the method disclosed in independent claim 1. According, claim 12 is also allowable for the same reasons recited in overcoming the rejection of claim 1.

With regard to dependent claims 8-11 and 19-20, these claims ultimately depend from independent claims 1 and 12, respectively, which have been shown to be allowable over the cited reference. Accordingly, these claims, by virtue of their dependency from an allowable base claim, are also allowable over the cited reference. Applicant respectfully requests that the rejection be withdrawn and the claims allowed.

With regard to the drawings, applicant prefers not to submit a new set of drawings at this time and will provide a formal set of drawings upon receipt of a Notice of Allowance for the invention claimed.

Having addressed the examiner's objections and rejections under 35 USC §§ 102 and 103, applicant submits that for the amendments and remarks made herein the reasons for the examiner's rejections have been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejections and the issuance of a Notice of Allowance.



Should any unresolved issues remain that the examiner believes may be resolved via a telephone call, the examiner is invited to call Applicant's attorney at the telephone number below.

Respectfully submitted,

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Date: $\frac{5}{6}$

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